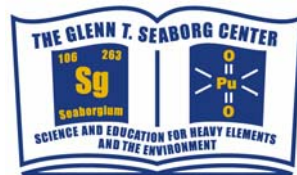




# Glenn T. Seaborg Center Seminar



Professor K. Peter Dorhout  
Department of Chemistry  
Colorado State University

## Synthesis of New Actinide Metal Main-Group Metal Materials

Wednesday, February 26, 2003

4 pm

Building 70A-3377

**Abstract:** The class of compounds that has been studied by our group are those compounds related to the actinide phosphates, carbonates, and other metallates, based not on oxide chemistry, but on heavier chalcogenide chemistry. As there are no known thio or seleno analogs, for example, to uranyl or plutonyl phosphates, a large class of compounds, it has been our plan to explore the ternary and quaternary phase regions of the actinide metal-main group-chalcogenides and develop a logical synthetic methodology that would lead to a better understanding of actinide coordination and materials chemistry. The presentation will introduce a series of thorium, uranium and plutonium chalcogenide and other main group metal compounds and examine their structural and bonding relationships within their family and draw connections to the families of metal oxides.